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1875/76

FIFTH AND SIXTH ANNUAL REPORTS

OF THE

CURATORS

OF THE

MUSEUM

OF

WESLEYAN UNIVERSITY,

Including a History of the Museum from its Formation.

(*First of printed series.*)

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OFFICERS OF THE MUSEUM.

CYRUS D. FOSS, D.D., *President of the University.*

WILLIAM NORTH RICE, PH. D., *Professor of Natural History.*

G. BROWN GOODE, M. A., *Curator of Museum.*

JOHN H. PILLSBURY, M. A., *Assistant.*

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Fifth Annual Report.

To the Board of Trustees of Wesleyan University.

The curators of the Museum respectfully submit their annual report, for the year ending June 27, 1876.

Five years have passed since, in 1871, the work of organizing a symmetrical and comprehensive educational museum was initiated by the removal of the collections to the Orange Judd Hall of Natural Science. It seems appropriate at this time to review the work which has been accomplished, to see to what extent our plans have been carried out, and what still remains to be done. In an appendix will be found an account, by Professor Johnston, of the early history of the College Cabinets.

The great importance of the museum of science and art, as an aid to instruction, is yearly becoming better appreciated by American educators. In Europe, the library and the museum stand side by side, each essential to the proper use of the other, their importance admitted to be equal. The more progressive American schools are beginning to recognize the necessity of providing such museums as shall enable their students to gain an intelligent insight into those studies toward which so much of the best thought of the day is being directed. A number of the leading colleges have made great progress in this direction within the past two years.

There is still, however, a great deficiency in this respect among institutions for superior instruction, as may be judged from the fact, that the Museum of Wesleyan University, with its limited resources and its small force of workers, together with its very recent origin, is surpassed by few college museums in America; and of these few, two at least, having large corps of professional naturalists and heavy special endowments, are to be considered chiefly as museums for research.

Of the 358 universities, colleges, and independent scientific schools in the United States, only 20 report museum statistics to the Bureau

of Education at Washington. It does not follow that the remaining 338 are absolutely without collections, for we are informed that 70 or more of them have "cabinets." It is fair to infer, however, that collections which are not in such condition as to furnish the basis for a report, can be of little avail for purposes of study and instruction. Of the 65 colleges under the patronage of the Methodist Episcopal Church, only two besides Wesleyan University have collections of any importance.

The statistics referred to above, presented in the Report of the United States Commissioner of Education for 1873, are very encouraging; for they show that our Museum, while not so rich as certain others in special departments, is exceptionally symmetrical, having a large number of departments fairly represented, and being thus unusually well adapted to purposes of instruction.

The growth of the Museum has not been entirely a random one. Plans were made at the very beginning, and every effort has been made to regulate by these plans the growth of the collections. No specimens have been sought which were not necessary to the completeness of the system, and the Museum has thus escaped the accumulation of a mass of miscellaneous material, which, however showy and attractive, would encumber its limited space, and add to the expense and trouble of its maintenance. Starting thus with a carefully devised plan, we have a substantial record of progress in the lists of *desiderata*, prepared five years ago, from the examination of which it will appear that decided advancement has been made toward the *completion* of the Museum. We say *completion*, however, only in a qualified sense, for while it is quite possible to complete our museum, in so far as it is intended to subserve the purposes of collegiate instruction, there is another aspect in which the subject should be viewed. The Museum owes to the world some service in the promotion of original research and the discovery of new facts and laws. There are two classes of museums: the first, of which that of the Smithsonian Institution in Washington and the Museum of Comparative Zoology in Cambridge are types, are devoted to scientific research, collection and elaboration of the "raw materials of science;" the other class, such as the U. S. Government Exhibition on the Exposition Grounds in Philadelphia, or the South Kensington Museum in London, have for their object popular instruction and amusement. A college Museum should partake in part of the nature of both. It should have the features of the latter, that it may excite interest in the studies which it illustrates, that it may instruct that

large proportion of the students who have no opportunity for a special study of its treasures, and also that it may perform its legitimate work in adorning the buildings and attracting popular patronage to the institution to which it belongs. It should also have the material and appliances for original research, which are necessary alike to instructor and student; to the former that he may have in some degree the spirit and habit of an investigator, without which he cannot be a successful instructor; to the latter that he may learn the methods of scientific thought, placing himself in the attitude of an observer.

A college Museum, in short, should be a comprehensive library of reference, in which each specimen with its label, is a volume, to be consulted for the determination of facts, or to be exhaustively studied for the purpose of acquiring mind-power and culture.

Our Museum has proved an invaluable aid in the science-teaching of the college during the past five years. Lectures upon zoology (including comparative anatomy and physiology), botany, geology, and mineralogy have been delivered to each class, illustrated largely by specimens; and, where the size of the class admitted, these lectures have often been delivered in the alcoves of the Museum, among the specimens. Several members of each class have availed themselves of the opportunities for work in the Natural History Laboratory, and have made very satisfactory progress in the practical study of comparative anatomy, zoology, botany, and mineralogy.

As a means of popular instruction, also, it is hoped that the Museum has been useful. The doors have been open to the public on Wednesday afternoons throughout the college year, and it is estimated that 8000 visitors have been admitted.

The officers of the Museum have done what they could toward the prosecution of original research. Two of them have been attached to the party of the U. S. Commissioner of Fisheries, engaged during the last four summers in the exploration of the waters of the coast of New England. The Curator has also carried on natural history explorations in the Bermudas and in Florida, and something has been done in the way of working up the geology and natural history of Middletown and vicinity. Some interesting facts have been discovered in the course of laboratory work. Several papers have been published by the officers of the Museum as the results of their studies, and other investigations are in progress, the results of which will be published hereafter.

Six new species of animals have been brought to light through the agency of the Museum:—two new fishes from the Bermudas, de-

scribed by the Curator as *Eucinostomus Lefroyi* and *Engraulis chœrostomus*; a new species of *Gobiesox* from Florida; a crustacean from Middletown, described by Professor S. I. Smith as *Crangonyx tenuis*; and two birds in the Spinney Collection described and figured by Mr. Geo. N. Lawrence in the London *Ibis* for July, 1875, as *Serphophaga leucura* and *Chlorospingus nigrifrons*.

It has already been stated that the increase of the Museum has been carried on in accordance with certain definite plans. These plans contemplate the expansion of the collections in two directions.

First, and most important, is the typical or instruction series, which is intended to illustrate all important variations in form and structure, and which should include representatives of each order or family in plants and animals, and each species and variety in rocks and minerals, thus enabling the instructor to demonstrate from specimens the statements presented in text-books and lectures. Such a series should include, in the zoological department, stuffed specimens, skeletons and other anatomical specimens, wet preparations in alcohol, glycerine, &c., and models and drawings of anatomical details.

The second of these special designs has been the completion of the local collection, which is to include all those forms found in our own district of country. Students are encouraged to collect for this series, both on account of the advantage to them from the work, and from the hope that some rare or new forms may thus be brought to light. It is hoped that through this department the Museum may be able to make contributions to knowledge, by assisting in the thorough investigation of the natural history of the surrounding country.

As an adjunct to this collection, we have aimed to secure any well authenticated named specimens of any forms occuring in North America. Such a collection is especially desirable for purposes of comparison and identification of species. It has, however, been made subordinate to the typical series, although, when possible, the specimens in the typical series have been selected from North American forms. A certain portion of space has also been set aside for the reception of miscellaneous specimens of natural history, which, while not called for by our plan, are often useful.

Having thus defined the objects and the policy of the Museum, it may be well to take up in some detail the consideration of what has actually been done in the way of securing additions to the collection and in their arrangement.

Much time has necessarily been occupied in overhauling, catalogu-

ing, and labeling old material, especially in the case of the Shurtleff collection of shells. The care of specimens already arranged in the cases is also a task whose magnitude can hardly be understood by one who is not familiar with museum work. Especially is this the case with the stuffed animals and birds, which must be constantly watched and protected from the ravages of moths and beetles. The wet preparations require much attention in the way of changing and replenishing the preservative fluids.

The accumulation of this kind of work rendered it necessary to employ additional assistance; and during the past year Mr. John H. Pillsbury, a graduate of the University of the class of 1874, has been attached to the corps. Mr. Pillsbury, by his skill as a naturalist and his steady industry, has accomplished much in the work of arranging and cataloguing the collection of invertebrates.

Acknowledgment is due to the Smithsonian Institution for its extensive donations to every department of the Museum during the past four years. The Curator has been employed a part of each year as Assistant Curator of the National Museum in Washington, and has thus had an opportunity of selecting from the duplicate specimens of that Museum such objects as were desirable to complete our own series. In this way several thousand specimens have been obtained, which will be specified in detail below. Prof. Joseph Henry, Secretary, and Prof. Spencer F, Baird, Assistant Secretary of the Smithsonian Institution, have aided this work in many ways, and to them our Museum owes much of its recent progress.

The specimens obtained from this source are much more valuable from the fact that they are named by the best authorities and may thus serve as standards of comparison. Many are in fact duplicate series of the types of special monographic studies.

A detailed account of the accesions to the Museum during the past five years, will be found in an appendix to this report. Here it is possible to give only a general idea of their character.

In the department of vertebrates the total number of specimens is 4050, of which 2864 are recent acquisitions. In the series of mammals are included 190 mounted specimens, among which are complete sets representing all the species of the rabbits, squirrels, mice, and weasels of North America, with a number of other forms, from the Smithsonian Institution, a coyote from J. H. Batty, a Virginia deer from Harlow Raymond, and a buffalo, camel, bear, beaver, square-flipper seal, and armadillo, from the Curator. The Smithsonian Institution has also contributed a full series of American

bats in alcohol, various other alcoholic preparations of mammals, and crania of 40 species of mammals, which are especially useful in the class-room. Nearly every genus of North American mammals is now represented. Especial notice may be taken of two valuable presents received recently from the Smithsonian Institution, the skins of two rare seals from the Pacific Coast, one the Alaska fur seal, so important in commerce, the other the sea dog of California. Owing to the death of our taxidermist, these have not yet been mounted. The Hon. Benjamin Douglas and the Hon. Jacob Sleeper have each contributed $50 for the purchase of skeletons, and a skeleton of the curious *Echidna hystrix* has been purchased. A part of this donation is still unexpended. A special effort is being made to secure specimens of all the large animals of North America, such as the elk, moose, prong-horn, mountain sheep, puma, and grizzly bear. In a few years these animals will have been exterminated, and specimens will be priceless.

Among birds there are 860 mounted specimens, an increase of 760 over the number of five years ago. The collection includes 1860 specimens, representing 750 species, of which 638 specimens were acquired by the purchase of the Shurtleff Collection. A very valuable collection from South America, including 97 species represented by 290 specimens, was donated by Joseph S. Spinney, Esq., of New York. Specimens of 150 species have been donated by the Smithsonian Institution, 40 by Dr. T. H. Bean of Washington, and 200 by the Curator. The collection of eggs of North American birds, mostly from the Smithsonian Institution, includes about 500 specimens of 130 species.

The collection of reptiles includes 230 species, represented by 300 specimens, mostly from the Smithsonian Institution. There are few fuller collections of North American reptiles in the world. It embraces all the turtles, with six or seven exceptions, nearly all the serpents, and a fair representation of the lizards.

Of amphibians there are 30 specimens of 20 species. The collection of fishes of North America is one of the very best in existence, being surpassed only by the collections in Washington, Philadelphia, Cambridge, and perhaps Salem. It includes 1100 specimens of 560 species. About 400 species have been received from the Smithsonian Institution, the remainder having been collected by the Curator on the coasts of New Brunswick, Maine, Massachusetts, Connecticut, Maryland, Florida, and the Bermudas.

The collection of articulates contains about 2000 specimens of

about 700 species. 1200 of these are insects, mostly from the Shurtleff Collection. The remainder, principally wet preparations of marine articulates, have been collected by Professor Rice while with the U. S. Fish Commission on the coast of Maine and Connecticut, and form an important part of the local collection.

The collection of mollusks and molluscoids includes about 90,000 specimens of perhaps 7400 species. The Shurtleff Collection of shells contains about 5000 species. The remainder consists chiefly of the alcoholic specimens obtained by Professor Rice, and a full series of authentically named North American shells, including about 1400 species, presented by the Smithsonian Institution.

The series of radiates and protozoans includes about 1500 specimens of 300 species. A few were received from the Shurtleff collection, but they are mostly from the New England collections of Professor Rice, and the Bermuda collections of the Curator. A noteworthy addition of the past year, is a series of sponges from the Bahamas and Florida, including 27 specimens of 13 species, received from the Boston Society of Natural History in exchange for sponges from the Bermudas. These are named by Prof. Hyatt, the best authority on sponges.

In the above estimates of numbers of specimens and species, the fossil forms as well as the recent have been included. The fossil specimens, with the exception of those required for the typical collection, are arranged in the lower hall of the Museum with the geological collection. Not included in this enumeration is a series of plaster casts of fossils, 900 in number, the gift of Orange Judd, Esq. These casts represent all the more important extinct forms of animals, and have been found invaluable for purposes of instruction.

During the past year a valuable series of Silurian fossils, representing some 200 species, has been received from Prof. Oliver Marcy, director of the Museum of Northwestern University, in exchange for marine invertebrates.

The Herbarium, principally derived from the Shurtleff collection, contains about 3000 species of plants, including a large collection from India, and a full series of the plants of Great Britain. It is deficient in plants of the Western United States, though this deficiency has been in part supplied by the gift of 200 species from the U. S. Department of Agriculture. Dr. Barratt of this city has presented a part of his herbarium, which possesses considerable local interest.

The collection of minerals and rocks contains about 10,000 specimens: 330 species of minerals are represented. This collection is

the result of the life work of our honored Professor Johnston. The Franckfort collection, bought in 1858, contained about 2000 specimens, mostly European, many of them extremely beautiful. The labors of Professor Rice and his classes have added largely to the local collection. The Smithsonian Institution has presented 200 specimens of 110 species of minerals from our western country, including a beautiful series of Geyserites, collected by Prof. Hayden's Survey in the Yellowstone National Park.

The collections in Ethnology and Archeology have received some attention, though not so much as they deserve. The Polynesian articles, mostly from the Missionary Lyceum, are very valuable. They were the work of a people, who have since lost the art of their manufacture. A number of interesting Indian implements, stone axes, hatchets, knives, arrow-heads, mortars, pestles, &c., have been presented. Every effort should be made to secure these relics of an extinct people. The interest and importance of these articles is increasing every day. It is extremely desirable that this department should receive more attention.

To sum up:—The collections of the University contain about 98,000 specimens of animals, representing about 11,000 species; about 6000 specimens of 3000 species of plants; about 10,000 specimens of 400 species of minerals and rocks; and about 500 specimens in ethnology;—in all about 115,000 specimens.

Sixth Annual Report.

To the Board of Trustees of Wesleyan University.

The curators of the Museum respectfully submit their report for the year ending June 26th, 1877.

The work of the Museum during the past year may be considered under three heads, viz: (1.) The acquisition of new materials for use in instruction and scientific research; (2.) The use of the collections for the increase and diffusion of knowledge; (3.) The care of collections already in the cases.

The acquisitions of the present year are believed to be quite as important as in any previous year, inasmuch as they are the results of an extended scientific exploration in a region comparatively unknown.

The geological formation of the Bermudas, and their remote position in mid-ocean, more distant from the equator than any other group of coral islands, render them a very interesting field in natural history investigation. Seven months, work in that locality, six by Mr. Goode and one by Professor Rice, produced even greater results than had been anticipated. It is not yet practicable to give a definite account of the collections made; but it may be stated that the Museum has already received sixty-five boxes, barrels, and crates filled with specimens, including over 1000 bottles of alcoholic preparations of fishes, reptiles, crustaceans, annelids, mollusks, radiates, and sponges, over 500 specimens of corals, 500 of dried sponges, 100 species of fishes in tanks, and 300 geological specimens, besides collections of shells, plants, &c. Most of the species have been collected in quantities, so that there will be a useful surplusage for purposes of exchange, after a full series has been selected for exhibition in the cases. Arrangements have been made by which these collections are to be submitted for study and report to several of the leading zoological authorities. The radiates, for instance, will be studied by Prof. A. E. Verrill of Yale College, the sponges by Prof. A. Hyatt of the

Boston Society of Natural History, the crustaceans by Prof. S. I. Smith of Yale College, the mollusks by J. Matthew Jones, Esq., of the Nova Scotia Institute of Natural Sciences, the ferns by Prof. D. C. Eaton of Yale College, while the geological specimens and the fishes and reptiles will be worked up in our own Museum. In this way the collections will be made useful to the world as a basis for scientific study, while at the same time the specimens will acquire an additional value as types. Our expedition has already borne fruits in the shape of four species of fishes new to science, described by Mr. Goode under the names *Atherina harringtonensis*, *Julis nitidissima*, *Fundulus rhizophoræ* and *Belone Jonesii*. Other investigations are in progress, and will soon be published.

The Museum has been so fortunate as to secure for another year the services of Mr. Pillsbury, who was employed by Mr. Goode to perform, during his absence, the duties of curator. In addition to his regular work in the care of the specimens, Mr. Pillsbury has nearly completed the arrangement of the herbarium, which is now for the first time in such a condition as to be accessible to students of botany.

The usual courses of special instruction referred to in the previous report have been carried on, and very creditable work has been done by several of the students in zoology and botany.

Over 1100 visitors have registered their names during the year. The Middletown Scientific Association has held its monthly meetings in one of the lecture rooms, and specimens from the Museum have been frequently used to illustrate the communications of members.

APPENDIX A.

THE EARLY HISTORY OF THE MUSEUM.

By John Johnston, LL. D., Fisk Professor Emeritus of Natural Science.

When the buildings and property of the American Literary, Scientific, and Military Academy came into the possession of the present corporation, styled Wesleyan University, there were in one of the rooms about 1000 specimens of minerals and fossils belonging to Dr. Joseph Barratt, formerly a professor in the Academy. These were subsequently purchased by the University for $400, and became the nucleus for following collections.

The first regular course of scientific lectures in the University was delivered in 1833 by Prof. W. W. Mather, and at this time, as the writer has been told, some friends of the University contributed $100 to purchase minerals for the cabinet. This was the first donation for that purpose for the University.

The next accession was the Prescott cabinet. A permanent scholarship, then valued at $500, was exchanged for it. Dr. Wm. Prescott, of Concord, N. H., made the collection, which comprised about 4000 shells, many of them duplicates, and which now by more recent additions includes also 1000 specimens of minerals and rocks, principally from Massachusetts and New Hampshire. The collection has been of great practical utility to the institution, though the specimens are not of the highest excellence.

The first President of the University, Rev. Dr. Fisk, when in Italy, procured about 100 specimens of Vesuvian rocks and minerals, to which Dr. Wm. Blanding, of Philadelphia, subsequently added 50 specimens of rocks of the same character, the whole forming a very satisfactory collection of the peculiar minerals of Vesuvius. Dr. Fisk also brought from Europe a box containing about 75 specimens of Cornwall minerals, as a gift from Mr. Carne, of that place, and a splendid specimen of the columnar basalt of the Giant's Causeway, with some other specimens of minerals from that vicinity. He also

obtained in Italy some valuable specimens of beautifully polished marble, and some remains of ancient works of art. During the same visit, Rev. Henry Fish, A. M., of the British Conference, consigned to him for the University a fine collection of British fossils numbering 500 specimens, mostly from the coal, magnesian limestone, and chalk formations, and a collection of about 750 English plants, carefully labeled and glued on paper and bound in five folio volumes.

Several years ago, Rev. Dr. Durbin contributed a fine assortment of plaster casts of trilobites and other Silurian fossils, 50 or 60 in number, all beautifully colored according to nature. They have been carefully preserved, and are highly valued. At a later period, Dr. Blanding, already mentioned, kindly sent us another collection of similar casts of Silurian fossils, increasing the number to 100. Rev. Dr. Olin, returning from his first visit to Europe, brought from Egypt and Palestine for our cabinet some rare fossils and valuable remains of works of art.

John Gove, Esq., of Boston, some ten years ago, generously gave $100 for the purchase of a small but valuable collection of minerals, which was at once incorporated into the general collection. Prof. Williams, of Alleghany College, several years ago favored us with a box of coal fossils from the vicinity of Pittsburg, Pa. Prof. A. Winchell, of Michigan University, more recently supplied us with some of the important fossils of Michigan. Prof. James G. Blair, formerly of the University of Ohio, sent us a collection of coal fossils from Ohio, and also no less than 235 specimens of different kinds of wood, mostly of trees and shrubs growing in Ohio. Mr. A. W. Genung, class of '46, three years ago, favored us with a very excellent collection of minerals from the mining districts of Colorado and Montana, many of them specimens of the ores found there, and others, specimens of rocks generally supposed to indicate the presence of valuable ores. It comprises about 110 specimens, and would serve an excellent purpose for a practical miner. Previously to this, a box of fine specimens from the line of the Hudson River Rail Road was received from Mr. Peter A. Badeau, then engaged as an engineer on that road. He was for a time a student in the University, but did not graduate.

Probably the most important addition ever made to our collection, previously to the purchase of the Shurtleff cabinet, was the Franckfort collection. This collection, made by Dr. Franckfort, then living in this place, was bought eleven or twelve years ago, and contains about 2000 specimens of minerals, many of them from the best European localities and of rare beauty, and some insects, which however are

not labeled. The $1400 given for the collection was contributed by a number of friends of the institution.

The recent acquisition of the Shurtleff cabinet marks an era in the history of the Natural History Collection of the University; its real value probably more than equaling that of the whole of the collections previously made. It consists of about 5000 species of shells, carefully arranged and labeled with the name and locality, and many thousand duplicates, and between six and seven hundred birds, also a number of small quadrupeds carefully stuffed, some fishes and batrahicans preserved in alcohol, and some boxes of minerals and fossils that have not been examined, and lastly, a fine collection of dried plants, most of which are carefully arranged, and many of them also properly labeled with name and locality. Of the birds, 103 are mounted; the rest are in the form of skins, which however are well preserved and in good condition for mounting. The collection was made by the individual labors of Simeon Shurtleff, M. D., late of Simsbury, Conn., where he died in Dec., 1865. He graduated at Amherst in 1832, and subsequently studied medicine, and settled in Westfield, Mass., where for many years he had an extensive practice. Other articles of interest such as coins and Indian relics, accompanied this cabinet in great numbers.

Besides the names mentioned before, many others have occasionally favored us by presenting specimens of interest in some branch of science, and we now have a box of minerals from the copper mines of New Jersey, from Mr. A. Bigelow of the class of '38, and another of rocks and fossils from Dr. Prescott, that have not been opened for want of shelf room.

The business of making collections was put in charge of the writer at his first connection with the University in 1835, and ever since a system of exchanges has been kept up with as much vigor as circumstances would permit. Exchange implies previous acquisition; and it should be understood that, though we are located in a district abounding in interesting minerals, specimens of any value cannot be procured without an expense which for several years the University was not able to meet.

But, notwithstanding the difficulties we have had to contend with, our collection of minerals, not including those of the Prescott or Franckfort collections, has greatly increased, until it numbers now about 3000 specimens, and the collection of rocks and fossils about 1200.

JOHN JOHNSTON.

July, 1868.

APPENDIX B.

CATALOGUE OF THE SPINNEY COLLECTION AND OTHER COLLECTIONS OF BIRDS FROM SOUTH AMERICA.

NOTE.—In 1874 Mr. Joseph S. Spinney, of New York City, presented to the Museum a collection of bird-skins obtained by him from the natives of Peru. These numbered 390, and represented 97 species. They were submitted for study to Mr. George N. Lawrence of New York, by whom the specific determinations were made. Mr. Lawrence thinks that the collection was made at some point well up on the Andes, probably not far from Bogota, New Granada. Mr. Osbert Salvin, Strickland Curator of Ornithology in the University of Oxford, who also examined the collection, coincides with this view, basing his conclusions upon the peculiar manner in which the skins are preserved, the methods employed by the natives varying greatly with locality.

A complete list of species is given below, and, for convenience of comparison, there are included in the same list all the species of South and Central American birds now represented in the Museum. These are designated by the figures prefixed. Those marked (1) are from Costa Rica, obtained by exchange from Prof. James Orton of Vassar College; (2) from Peru, presented by Rev. E. B. Smith of Middletown; (3) from Bogota, collected by Hon. A. A. Burton, and presented by the Smithsonian Institution; (4) from Costa Rica, presented by the Smithsonian Institution; and (5) from South America generally, acquired with the Shurtleff Collection.

Almost all of the species herein specified have been mounted and placed in the exhibition cases.

TURDIDÆ.

Turdus gigas,
1. Turdus Grayi.

TROGLODYTIDÆ.

Cinnicerthea unibrunnea.

CINCLIDÆ.

Cinclus leuconotus.

VIREONIDÆ.

Vireosylvia flavoviridis.

SYLVICOLIDÆ.

1. Helminthophaga peregrina,
Dendrœca Blackburniæ,
" striata,
" virens,
Setophaga verticalis,
" ruficoronata,
Myiodioctes pusillus.

TANAGRIDÆ.

Procnias occidentalis,
Euphonia xanthogastra,
Tanagrella calophrys,
Diva Vassori,
Calliste cyaneicollis,
" rufigularis,
" lanigera,
Iridornis Dubusii,
Anisognathus atrocrissa,
Buthraupis cucullata,
" chloronota,
Compsocoma notabilis,
" cyanoptera,
Tanagra Darwinii,
5. " (cayennensis)

Rhamphocœlus icteronotus,
4. " microrhina,
5. Pyranga, sp.
Chlorospingus nigrifrons,
Lawrence, new species.
Buarremon latinuchus,
" castaneiceps,
Arremon erythrorhynchus,
Psittospiza Riefferi.

FRINGILLIDÆ.

Phrygilus unicolor,
" alaudinus,
Pheucticus chrysogaster,
Spermophila luctuosa,
" gutturalis,
Catamblyrhynchus diadema,
Euspiza americana.

CORVIDÆ.

Cyanocitta turcosa,
4. Cyanocorax affinis.

ICTERIDÆ.

Ostinops Alfredi,
4. Cassicus microrhynchus,
Icterus chrysocephalus,
5. " (vulgaris.)

CŒREBIDÆ.

Diglossa personata,
" humeralis,
" similis,
Chlorophanes atricapilla.

FORMICARIIDÆ.

Formicivora axillaris,
Pyriglena picea,
Grallaria monticola,
" squamigera.

TYRANNIDÆ.

1. Agriornis andicola,
Muscisaxicola albfrons,
1. Todirostrum cinereum.
Serphophaga leucura
Lawrence, new species.
Anæretes parvulus,
Tyrannus melancholicus,
Pyrocephalus rubineus,
Milvulus tyrannus.

COTINGIDÆ.

4. Tityra personata,
Pipreola jucunda,
Pachyrhamphus atricapillus,
" versicolor,
Heliochœra rubricristata,
Querula cruenta,
3. Rupicola crocea,
" sanguinolenta,
Cephalopterus ornatus.

DENDROCOLAPTIDÆ.

Synallaxis frontalis,
Margarornis squamigera,
Pseudocolaptes Boissonetii,
Dendrornis triangularis.
Anabazenops subularis.

PTEROPTOCHIDÆ.

Agathopus micropterus.

PSITTACIDÆ.

5. Psittacus amazonius.

PICIDÆ.

4. Campephilus guatemalensis.

RHAMPHASTIDÆ.

5. Rhamphastos Cuvieri,
5. Rhamphastos, sp.
6. Pteroglossus Humboldtii.

CUCULIDÆ.

5. Crotophaga ani,
Piaya cayana.

BUCCONIDÆ.

4. Monasa grandior.

GALBULIDÆ.

5. Galbula viridis.

MOMOTIDÆ.

5. Momotus cæruleiceps.

TROGONIDÆ.

5. Trogon mexicanus,
5. Trogon, sp.
Pharomacrus auriceps,
3. " antisanus.

TROCHILIDÆ.

5. Phæthornis euronymus,
Petasophora iolata,
Oreotrochilus pichnicha,
5. Lampornis niger,
5. " mellivorus,
3. Helianthea Bonapartii,
" lætitiæ,
3. Heliotrypha Parzudaki,
3. Thalurania columbica,
3. Bourcieria torquata,
3. Panoplites flavescens,
Eriocnemis luciana,
3. " aureliæ,
3. " vestita,
3. " cupreiventris,
3. " lugens,
5. Trochilus moschitus,
Selasphorus platycercus,
3. Calothorax heliodon,
Myrtis fannia,
Lesbia amaryllis,

3. Cyanomyia Franciæ,
3. Cynanthus cyanurus,
5. " furcatus,
3. Saucerottia cyaneifrons,
Chlorostilbon chrysogaster,
3. " angustityrannus,
Aglæactis equatorialis,
Metallura quitensis,
3. Spathura Underwoodii.

COLUMBIDÆ.

Chamæpelia passerina.

CRACIDÆ.

4. Ortalida cuneiceps.

FALCONIDÆ.

Phalcobænus megalopterus.

STRIGIDÆ.

Strix, sp.

SCOLOPACIDÆ.

Tringoides macularius,
Actodromus Bairdii.

PARRIDÆ.

5. Parra jacana.

PHŒNICOPTERIDÆ.

Phœnicopterus, sp.

TANTALIDÆ.

Ibis, sp,

ANATIDÆ.

2. Anas moschatus.

PHALACROCORACIDÆ.

1. Graculus, sp.

PODICIPIDÆ.

Podiceps, sp.

APPENDIX C.

DONATIONS TO THE MUSEUM.

DONATIONS OF MONEY, 1871-7.

Francis C. Goode, Esq.,	$100 00
Hon. Jacob Sleeper,	50 00
Hon. Benjamin Douglas,	50 00
Joseph B. Thomas, Jr., Esq.,	30 00
Hon. Daniel L. Harris,	25 00
Horace Smith, Esq.,	10 00
William North, Esq.,	25 00
E. T. Fitch, Esq.,	50 00
Heman B. Allen, Esq.,	5 00

DONATIONS OF SPECIMENS, 1833-77.

NOTE.—*The record of donations previous to* 1870 *is necessarily very incomplete.*

ADAMS, A. W.—Cuticle of Blackfish (*Globicephalus melas*), Provincetown, Mass.

AGRICULTURE, U. S. DEPARTMENT OF, WASHINGTON, D. C.—Collection of plants from Colorado and Alaska, 200 species.

ALFORD, D. S.—Brown bat (*Scotophilus fuscus*), Middletown.

ALLEN, W. F.—Stone pestle, Tariffville, Conn.

ALLYN, J. G.—Nest and young of red squirrel (*Sciurus hudsonius*), Middletown.

ANDREWS, LUMAN.—Slab of sandstone containing fossils, Southington, Conn.; dolomite in sandstone, New Britain, Conn.

ARNOLD, ISAAC.—Molybdenite, beryl, pyrite, pyrrhotite, epidote, magnetite, and menaccanite, Arnold's Quarry, Haddam.

ARNY, GEN. W. F. M.—Arrow from Navajo Indians, New Mexico.

ASTON, RALPH, U. S. NAVY.—Bricks of enameled porcelain, China.

BABCOCK, S.—*Mactra solidissima*, Long Island.

BACON, B. C.—Family of young woodchucks (*Arctomys monax*), and young crows (*Corvus americanus*), Middletown.

BADEAU, P. A.—Minerals from Hudson River, R. R.

BAILEY, AUSTIN.—2 specimens of red tailed buzzard (*Buteo borealis*), Middletown, (purchased).

Bailey, Dr. L.—Indian stone maul, Middletown.

Bailey, E. R.—Larva of walnut moth (*Citheronia regalis*), Middletown.

Baird, Prof. S. F., U. S. Com. of Fisheries.—Ground Snake (*Storeria occipitomaculata*), and green snake (*Leptophis vernalis*), Grand Manan, N. B.

Balantine, W.—Worm from grass roots, Middletown.

Baldwin, L.—Gray Squirrel (*Sciurus carolinensis*), and skull of raccoon (*Procyon lotor*), Middletown.

Barnes, W. H.—Reptiles in alcohol, Middletown.

Barratt, Joseph, M. D.—100 specimens of minerals and fossils from Europe and America, (purchased); 100 bird skins from Middletown and vicinity; Herbarium (deposited).

Batty, J. H.—Skin of Coyote (*Canis latrans*), Colorado.

Bean, Dr. Tarleton H.—Collection of bird skins (40 species), from Pennsylvania and District of Columbia.

Beeman, L. C.—Lepidopterous larvæ, Middletown.

Best, A. E.—Larva of moth (*Telea polyphemus*); garter snake, (*Eutaenia sirtalis*), Middletown.

Bidwell, C. B.—Hymenopterous insect (*Mutilla, sp.*)

Bigelow, A.—Minerals from copper mines, New Jersey.

Bisbee, R. E.—Millerite, Antwerp, N. Y.

Blair, Prof. J. G.—Collection of fossils, and 235 specimens of wood from Ohio.

Blake, M.—Portion of tusk of mammoth (*Elephas primigenius*), Meigs Co., Ohio.

Bliss, John.—Tooth of walrus (*Rosmarus Cookii*), St. Lawrence Id., Pacific; carved paddles from Harvey Group.

Bonfoey, E.—Skull of pelican (*Pelecanus fuscus*), South America.

Boston Society of Natural History.—(Prof. A. Hyatt) 27 specimens (13 species and varieties) of sponges from Florida, Key West, and Nassau, (exchanged for Bermuda sponges).

Boyd, C. W.—Hog-nosed snake (*Heterodon platyrhinus*), and ring-necked snake (*Diadophis punctatus*).

Brush, Prof. G. J.—Calamine, Stirling Hill, Sussex Co., N. J.

Buell, W. G.—Butcher bird (*Collyrio borealis*), East Hampton, Conn.

Burke, G. W., M. D.—Quartz crystals and pathological specimens; bone adze from Sandwich Is.

Burke, J. C.—Insect galls, Middletown, Conn.; skeletons of alligator (*Alligator mississippiensis*), Florida, and musquash (*Fiber zibethicus*), Middletown.

Burton, Rev. H.—9 minerals, Trumbull, Conn.; 70 minerals (locality not specified), and specimen of siderite, Roxbury, Conn.

Burwash, Prof. L.—Spiegeleisen, Bessemer Steel Works, Troy, N. Y.

Carne, Mr.—Minerals, Cornwall, England.

Camp, Col. F. A.—Indian arrow.

Camp, S. T.—Young bat, Middletown; living snapping tortoise (*Chelydra serpentina*), Durham, Conn.

Camp, Mrs. S. T.—Specimens of oyster crab (*Pinnotheres ostreum*).

Chalker, C. C.—Coot (*Fulica americana*), from Starr's Pond.

Chandler, P.—Minerals, Middletown and Cheshire, Conn.

Clark, F. B.—Snake (*Diadophis punctatus*), Middletown.

Clark, J. H.—55 specimens of fossil ferns, Portsmouth and Newport, R. I. (exchanged for minerals).

Clark, Mrs.—Tubes of worm (*Serpula dianthus*), Newport, R. I.

Clark, W. G.—30 specimens of larvæ, pupæ and imagoes of Colorado potato beetle (*Doryphora decemlineata*), Michigan.

Coe, W. W.—Young red-tailed buzzard (*Buteo borealis*), great northern loon (*Colymbus torquatus*), sharp skinned hawk (*Accipiter fuscus*), red headed woodpecker (*Melanerpes erythrocephalus*), beautiful mounted blue heron (*Ardea herodias*), nest of warbler (*Parula americana*), and 2 skins of white weasel (*Putorius erminea*), Portland, Conn.

Cocagne, J. H.—Millerite, Gouverneur, N. Y.

Coit, O. B.—Ruffled grouse (*Bonasa umbellus*), and warbler (*Dendræca palmarum*), Middletown.

College, Friends of the.—Collection of minerals.

Coleman, Prof. Lyman.—New England snow shoes.

Coleman, N.—Cretaceous fossils, Mississippi.

Conner, B. C.—(*Gastrophilus equi*, *Ascaris megalocephala* and *Ceratomia amyntor*), Middletown.

Coston, H. H.—Specimens of calamite.

Coughlin, J. H.—Young loon (*Colymbus torquatus*), Portland, Conn.

Crawford, M. B.—Insects, (*Eactis imperialis* and *Meloe angusticollis*), Middletown.

Cressy, Noah, M. D.—Skull of raccoon, (*Procyon lotor*), minerals and skulls.

Crittenden, A. R.—Worm tubes, Portland, Conn.; caddis worms, insects (*Lycosa sp.*, *Rhyssa lunator*), leaves with galls; 50 specimens of batrachian larvæ, insect (*Tremex columba*), snake and eel, Middletown; sienite, Red Beach, Me.; river mussel (*Margaritina arcuata*), Pleasant River, Me.; collection of minerals and fossils; sword of sword fish (*Xiphias gladius*), and piece of log bored by ship-worm (*Teredo navalis*), from Gloucester, Mass.; specimen of window glass, ground by wind blown sand, from house on Cape Cod; fossil ferns from Portsmouth, R. I.

Crosby, J. G.—Mounted owl (*Bubo virginianus*), and head of pickerel (*Esox fasciatus*).

Crowell, Hiram N.—Snowy owl (*Nyctea nivea*), Middletown.

Cummings, Rev. Joseph, DD. LL.D.—Indian pestle from Middletown.

Cummings, Mrs.—Stalactite and fossil shell, Giant's Causeway, Ireland.

Cuvierian Society of Wesleyan University.—Miscellaneous collections in zoology, mineralogy, and archeology.

Dalby, Peter.—Newt (*Salamandra subviolacea*), Middletown, (purchased), and malformed egg.

Dana, Prof. J. D.—Specimen of titanite, Haddam, Conn.

Dickinson, Miss Ella.—Fossil copal containing insects from East Coast of Africa.

Dimmock, G.—(See under Stebbins, S.)

Donahoe, D. J.—Lepidopterous larva, Middletown.

Drake, J. L.—Spider (*Lycosa sp.*), Middletown.

Dow, Lorenzo.—Skin of great ant-eater (*Myrmecophaga jubata*), Venezuela.

Dunmore, W. T.—Living golden eagle (*Aquila chrysaetus*), Vermont.

DURBIN, REV. J. P., D.D.—50 casts of fossils.

DWIGHT, REV. H. G. O.—Collection of ethnological specimens, Constantinople.

EATON, I. C.—Specimen of black snake (*Bascanion constrictor*), and menobranch (*Necturus lateralis*).

EDGERTON, C. S.—Diagrams of museum.

ELDER, W. W.—Marine invertebrates, Norwalk, Conn.; crustaceans and mollusks, Vincennes, Ind., and Great Miami River.

ELLIOTT, G. W.—Cast of trilobite, Cazenovia, N. Y.

ENDLICH, PROF. F. M.—Stilbite, Uncomphagra Mountains.

EUSTIS, J. E.—Millerite, Sheffield Mine, Somerville, N. Y.; specimens of Potsdam sandstone showing ripple marks, Hammond, St. Lawrence Co., N. Y., black-snake (*Bascanion constrictor*), and water-snake (*Tropidonotus sipedon*), Tariffville, Conn.; brain of dog (*Canis familiaris*).

FALLON, REV. J. G.—Specimen of natural graft from Clinton Co., N. Y.; malformed bean pod, barnacles, &c.

FISK, PRESIDENT WILBUR, D.D.—Collection of rocks and minerals from Europe.

FISK, MRS. DR. W.—Cocoon of moth (*Samia cecropia*), insects (*Æschna heros* and *Phylloptera oblongifolia*) and nest of (*Osmia sp.*), Middletown.

FISH, REV. HENRY.—500 fossils and 750 plants from England.

FORT, F. W.—Magnetite, Succasunna, N. J.; zinc ore and other minerals, Ogdensburg, N. J.

FOWLER, ANSON.—Specimens of calcified wood from Lauderdale Co., Miss.

FRANCKFORT, E., M. D.—2000 specimens of minerals from Europe and United States (purchased).

FRANKLIN, L. W.—Specimens of butcher bird (*Collyrio borealis*), and pine grosbeak (*Pinicola enucleator*).

GARDINER, ALFRED.—Bat, and malformed hen's eggs, Middletown.

GARDINER, REV. F., D.D.—Specimen of toad (*Bufo americanus*), red variety; argentiferous galena, Newbury, Mass.; eggs of tent catarpillar moth (*Clisiocampa americana*).

GARDINER, FRED.—Specimen of hair-worm (*Gordius aquaticus*), from intestine of cockroach.

GARDNER, CAPTAIN.—Stone adze from Mangaia, Harvey Is.

GENUNG, A. W.—100 minerals from Colorado and Nevada.

GOLDSMITH, N. S.—Human skull.

GOODE, B. P., M. D.—Snake's eggs, Cincinnati, O.

GOODE, G. BROWN.—Zoological, geological, botanical and ethnological collections from Eastport, Me.; skin of gray fox (*Urocyon virginianus*), Washington, D. C.; skin of seal (*Halichœrus gryphus*), and bird-skins and eggs from Grand Manan, N. B.; 3 gray owls (*Scops asio*), Middletown; plants from East Florida; collection of reptiles and fishes; general collections from Bermuda, (expeditions 1872, 1877), skin of beaver (*Castor canadensis*), Akerly, Iowa; mammal skins, Florida; skin of buffalo (*Bison americanus*), Kit Carson, Nev.; skins of sloth (*Arctopithecus griseinucha*) huron (*Galictis barbara*), Central America and American civet-cat (*Bassaris astuta*), California; head of carabou (*Rangifer carabou*), Calais, Me.; skin of skunk (*Mephitis americana*), from Paterson, N. J.; collection of birds embracing 109 specimens from Maryland

and Virginia; chuck-wills-widow (*Antrostomus carolinensis*), Arlington, Fla.; series of skins of grouse and gulls from North America; 100 specimens (40 species) of fishes and invertebrates from the Potomac and St. John's rivers; herbarium from Middletown and vicinity; collection of fishes, Wood's Holl, Mass.; skeleton of monkey.

Goode, F. C.—Specimen of opossum (*Didelphys virginiana*); and fishes in alcohol, Knoxville, Tenn.; shells, fishes, &c., from Bermuda; pouch of brown pelican (*Pelecanus fuscus*), Apalachicola, Fla.; collection of fishes, shells and Indian pottery, Florida.

Goode, Mrs. F. C.—Larvæ of mammoth beetle (*Dynastes tityus*); insects and arrowheads, Knoxville, Tenn.; hematite from Sharon Station Ore Bed, Amenia, N. Y.

Goodsell, Rev. D. A.—Snapping tortoise (*Chelydra serpentina*), Meriden, Conn.

Goodwin, F. J.—Ethnologica from Africa.

Gove, John.—Collection of minerals.

Graves, A. M.—Prairie gopher (*Spermophilus tridecemlineatus*), Kingston, Wisc.

Greenfield, W. H.—Stone adze from Hervey Group.

Griffin, M. E.—Indian axe, Middletown.

Gutbrod, Philip.—Arrow head, Guilford, Conn.

Hall, James.—Miscellaneous collections made by Alfred Hall, Portland, Conn.

Hand, Rev. J. H.—Collection of bird skins, Connecticut.

Harrington, Prof. C. S.—Specimen of white oak (*Quercus alba*), Ascutney, Vermont.

Hatfield, Prof. M. P.—Collection of insects, Middletown.

Haven, Bishop G.—Corundum from Georgia.

Haven, W. I.—Baculite and calcified wood from Colorado.

Hazen, Lucius R.—Walking stick insect (*Diapheromera femorata*), Western Mass.

Hibbard, Prof. R. G.—Skin of bull-snake (*Pityophis mexicanus*), Texas; oysters (*Ostrea virginica*), Stony Creek, Conn.

Hodgson, F. D.—Tape worm (*Tænia solium*).

Holbrook, R. H.—Collection of Silurian fossils, Ohio. (exchanged).

Hopkins, Arthur.—Barred owl (*Syrnium nebulosum*), Middletown.

Hotchkiss, Hon. J.—Calamites, Nova Scotia.

Hubbard, Hon. C. C.—Branches of mistletoe (*Phoradendron flavescens*), fossil shells and Indian relics from Florida; fossils from phosphate beds of South Carolina.

Hubbard, Mrs. S. D.—Wasp nest, Middletown.

Hughes, G. W.—Lepidopterous larva, Middletown.

Hurd, Cyrus.—Minerals, Middle Haddam, Conn.

Hyatt, Prof. A.—See under Boston Society of Natural History.

Jackson, E.—Eggs and nest of woodcock (*Philohela minor*), Middletown.

Jacobs, Mrs. H.—Minerals, California; parlor fire works, China; monstrous rose, Springfield, Mass.

Jewell, Pliny.—Sulphur and other minerals from Girgenti, Sicily.

Jillson, S.—Mounted birds, Hudson, Mass., (purchased).

JOHNSTON, A. K.—Dutch tiles from Columbia Tavern, New York.

JOHNSTON, PROF. JOHN, LL.D.—Numerous minerals and geological specimens; larva, pupa and imago of army worm; specimen of mongrelized Indian corn; specimen of *Nematus ventricosus*.

JOHNSON, W. S.—Ethnological specimens from western Indians; mineralogical collections (deposited).

JOUY, PIERRE L.—4 species of birds, Washington, D. C.

JUDD, JAMES.—Collection of insects, Middletown.

JUDD, ORANGE.—Red squirrel (*Sciurus hudsonius*), and chipmunk (*Tamias striatus*), from Middletown; volcanic lapilli, Pompeii.

KENT, S. W.—Mica crystals, Middletown; bat East Haddam, Conn.

KIDDER, PROF. DANIEL P., D.D.—Collection of ethnological specimens, Brazil.

KILBOURN, J. B.—King penguin (*Aptenodytes Pennantii*), Pacific Ocean.

KING, REV. J. D.—Collection of Indian stone implements, Martha's Vineyard, Mass.; silver ore, Newburyport, Mass.; shells, Rock Island, Ill.

KIRBY, S. J.—Reptiles from Middletown.

KNEIL, T. R.—Luna moth (*Lunatia luna*), Middletown.

LANYON, MR.—Quartz crystals, Cheshire, Conn.

LEE, DAVID.—Arrow head, Knoxville, Tenn.

LEE, MRS. P. E.—Silurian fossils, Cincinnati and vicinity.

LIBBY, I. C.—Fungus from Berlin, Conn.

LINDSAY, T. B.—Striped snake (*Eutaenia sirtalis*, var *ordinata*), and larva of moth (*Telea polyphemus*).

LOOMIS, REV. C. L., M. D.—Tourmaline, Haddam, Conn.; quartz, Chatham, Conn.; Indian implements, Bloomfield, Conn.; post tertiary conglomerate, Higganum, Conn.; minerals, Tariffville, Conn.; skull of cat (*Felis domestica*); minerals, Portland, Conn.; skeleton of hog (*Sus scrofa*); specimens of orthoclase, Haddam, Conn.; gneiss and smaltite, Cobalt, Conn.; feldspar and green tourmaline, Middletown; argentiferous galena and serpentine, Newburyport, Mass.; hair concretion from stomach of calf, W. Granby, Conn.

LOWELL, D. R.—Devonian fossils.

LYNG, JAS.—Carboniferous fossils, Braidwood, Will Co., Ill.

MARCY, PROF. OLIVER, LL.D.—(See under Northwestern University).

MARKHAM, E. A.—Fœtal calf.

MARKHAM, H. C.—Gar-fish (*Belone truncata*), Connecticut River.

MARTHIN, JAMES B.—Larva of moth (*Empretia stimulea*), Middletown.

MARTIN, PROF. D. S.—Lignite and specimen of *Eozoum canadense*.

MARTIN, W. W.—Blue jay (*Cyanurus cristatus*), red-headed woodpecker (*Melanerpes erythrocephalus*) and golden-winged woodpecker (*Colaptes auratus*) and barred owl (*Syrinum nebulosum*), from Rocky Hill, Connecticut.

MCDONOUGH, LIEUT. C., U. S. NAVY.—Implements from Fiji Islands.

MCGREW, G. H.—Tourmaline crystal, Middletown.

MERCEIN, T. R.—Collection of insects, Middletown.

METCALF, G. E.—Insect (*Crytophyllus concavus*), Middletown, Conn.

MINER, MRS. L.—Nest of chewink (*Pipilo erythrophthalmus*), and insects, Middletown, Conn.

MINER, THOMAS.—Clubs from Kingsmill and Sandwich Is., and image from New Zealand.

Missionary Lyceum of Wesleyan University.—Ethnological collection, comprising about 300 specimens.

Neale, A. T.—Garter snake (*Eutœnia sirtalis*), from Cobalt.

Negus, Hon. Charles.—2 specimens of pinnated grouse (*Cupidonia cupido*), Fairfield, Iowa.

Newton, H. G.—Arrow head from Durham, Conn.

Newton, I. C.—Ancient powder-horn.

North, Mrs. C. J.—Moth (*Samia cecropia*), Middletown.

North, Rev. F. M.—Reptiles and bird skins from Palatka, Fla.

North, J.—Diamond-drill core and minerals.

North, Miss L. V.—Quartz crystals from McMinnville, Tenn.

Northwestern University, Evanston, Ill.—(Prof. Oliver Marcy) Collection of Silurian fossils from vicinity of Chicago (exchanged).

Norton, C. R.—Iron ore from Amenia, N. Y.

Nye, E. B., M. D.—Slag found in ashes of barn struck by lightning, Sandwich, Mass.

Olin, President.—Rocks, minerals, and archeological specimens from Egypt and Palestine.

Orton, Prof. James.—Geological specimens from the Andes, and three species of monkeys from Brazil (purchased). See also under Vassar College.

Osborn, E.—Musquash (*Fiber zibethicus*), from Middletown.

Palmer, Dr. E.—Calcareous sandstone from Junction City, Kansas.

Palmer, Joseph.—Beautifully mounted specimen of white-crowned sparrow (*Zonotrichia albicollis*).

Pelton, C. A.—Specimen of Gar-fish (*Belone truncata*), Maromas, Conn.

Pelton, C. H.—Horned toad (*Phrynosoma cornutum*), captured in Griffin's Grove, Middletown.

Pelton, J. A.—Bat (*Scotophilus fuscus*), Middletown.

Pelton, J. P.—Hooded warbler (*Myiodioctes canadensis*), Middletown.

Pelton, Ralph.—Yellow rattlesnake (*Crotalus durissus*), Portland, Conn.

Pitt, J. R.—6 young mice.

Pickering, T. R.—10 casts of Jurassic fossils, Solenhofen, Bavaria; specimen of spun glass from Austria.

Pillsbury, J. H.—Collection of insects, spiders and mollusks from Tariffville, Conn.; collections of insects from Limington, Me., and Middletown.

Prentice, George.—Insect (*Meloe angusticollis*).

Prentiss, William.—War clubs from Marquesas and Fiji Is.

Prescott, Wm., M. D.—Minerals and shells from Massachusetts and New Hampshire (purchased).

Raymond, C. H.—Yellow warbler (*Dendrœca aestiva*) and black bird (*Quiscalus purpureus*), Middletown.

Raymond, Harlow.—Emery from Chester, Mass.; wasps nest, Middletown; Virginia deer (*Cariacus virginianus*), from Wisconsin, wild-cat (*Lynx rufus*) from N. Madison, Conn.; and jaw of dolphin (*Delphinus, sp*).

Rice, Captain.—War clubs from New Zealand and Sandwich Is.

Rice, Eddie L.—Wood tortoise (*Glyptemys insculpta*), gold-fish (*Carassias auratus*), moth (*Saturnia io*), leaves of pitcher plant (*Sarracenia purpurea*) and mole (*Blarina talpoides*).

Rice, Prof. William North.—Collection of Miocene fossils and lake relics from Switzerland; head of Virginia deer (*Cariacus virginianus*); minerals from Rice's Cut, Air Line R. R.; minerals from Tariffville and Granby; zoological specimens from Tariffville; minerals and fossils from Europe; minerals from Cobalt, Conn.; fossil brachiopods from Catskill Mts.; minerals from Haddam, Conn.; minerals from White Rocks and various collections from Middletown; geological and zoological collections from Casco Bay, Me.; Noank, Conn, and the Bermudas.

Rich, Isaac.—Fossils from California.

Roberts, Mrs.—Porcelain bricks from China.

Robinson, Mrs. D. P.—Trilobites.

Rockwell, E.—Arrow head, Middletown.

Roe, J. M.—Insects and quartz crystals, Herkimer Co., N. Y.

Round, Rev. E. J.—Coral (*Oculina implicata*), Beaufort, N. C.

Russell, A. L.—Fossil tooth of hog

Russell, J.—Loon (*Colymbus torquatus*), from Haddam, Conn.

Russell, Wm.—Rose quartz.

Russell, Mrs. Wm.—Chinese paintings.

Russell, W. A.—Datolite in trap from Tariffville, Conn.; speckled tortoise (*Nanemys guttatus*).

Sage, J. H.—Beautifully mounted specimens of brown creeper (*Certhia americana*), sheldrake (*Mergus americanus*) and red-shouldered hawk (*Buteo lineatus*), from Portland, Conn.

Seys, Rev. M.—Collection of ethnological specimens, Monrovia, Africa.

Sizer, Mr.—Clubs &c., from Sandwich Is. and New Zealand; adze and clubs from Fiji Is.

Skeel, C. M.—Fossils and birds, Herkimer and Livingston Counties, N. Y.

Skeel, F. D.—Bird skins from New York; iron ore from Sterling Ore Bed, Cayuga Co., N. Y., and various zoological collections from Middletown and vicinity.

Skene, Rev. Geo.—Minerals and plants from Rocky Mountains.

Skewess, Jas.—Minerals.

Skilton, Hon. J. A.—Cast of Aztec calendar stone from City of Mexico.

Smiley, C. W.—Sexton beetle (*Necrophorus americanus*).

Smith, Rev. E. B.—A pair Muscovy ducks (*Anas moschata*), 3 domestic rabbits.

Smithsonian Institution, Washington, D. C.—Professor Joseph Henry, Secretary; Prof. S. F. Baird, Assistant Secretary.—Collection of North American and foreign tortoises; 27 specimens of Indian foods from Southern Utah; collections of North American serpents, phrynosomas, salamanders, frogs, lizards, weasels, mice, bats and squirrels; American and foreign fishes; collection of geyserites and associated minerals from Yellowstone National Park, (Prof. F. V. Hayden); collection of building stones from public buildings in Washington, D. C.; collection of minerals; collection of land, fresh water and marine shells of made by U. S. Exploring Expedition, (Captain Wilkes); marine shells from California, Vancouver's Island, Mazatlan, West Indies and Europe; European land and fresh-water shells; casts of fossils; casts of 48 Indian implements in U. S. National Museum; collection of stone implements from New England; collection of mammal skins from North America; skulls of dolphins

from North Carolina; skins of 112 species of birds from North America; skins of reptiles and fishes from North America; eggs of 146 species of North American birds; skeletons of six species of birds from Alaska.

SOUTHMAYD, G. M.—Pharyngeal teeth of scuppaug (*Stenotomus argyrops*); Indian stone gouge from Indian Hill.

SPENCER, S. H.—Possum (*Didelphys virginiana*) from Middletown (purchased).

SPINNEY, JOSEPH S.—290 specimens (97 species) of birds from Bogota and vicinity; stone idol from 60 feet below the surface of guano bed, Guanape Is., Peru; bow and arrow from Modoc Indians.

SANFORD, REV. A. B.—Weasel (*Putorius erminea*), and great blue huron (*Ardea herodias*), in flesh, from Redding, Conn.

SAVAGE, ROXA M.—Nest of pewee (*Sayornis fuscus*), Greenwich, Conn.

SCUDDER, N. P.—Stuffed specimen of fish (*Cutostomus teres*).

SEWALL, MRS. THOMAS.—Sword from Arabia.

SHELDON, E. F.—Minerals and fossils from California (exchanged).

SHEPHERD, REV. J. B.—Moth (*Samia cecropia*), and garter snake (*Eutœnia sirtalis*).

SHEW, A. M., M. D.—Dendrite from Malone, N. Y.; collection of polished woods from California.

SHURTLEFF, MRS. DR. SIMEON.—THE SHURTLEFF COLLECTION, (purchased).

SILLIMAN, PROF. BENJ.—Sand from gold washings, Butte Co., Cal.

STEBBINS, S. AND DIMMOCK, G.—Collection of coleoptera fron Western Massachusetts.

STERLING, W. M.—Milliped (*Spiribolus marginatus*), Lyndon, Vt.

STEVENS, E. P.—Young sturgeon (*Acipenser oxyrhynchus*), Maromas, Conn.

STOERZER, JULIUS.—4 species of birds, mounted, from New York.

STUART, C. F.—Bones from Indian graves, Middletown.

SWEET, MRS. DR.—Humming bird's nest and collection of minerals.

TAFT, C. H.—Sulphur from Sicily.

TAFT, REV. M. L.—Specimen of tailless breed of cats.

TALBOT, E. H.—Granite cracked by the great fire in Boston, Mass.

TALMADGE, A. M.—Collection of bird's eggs; anatomical preparations.

TAYLOR, EDGAR S.—Stone implements from Southampton, Mass.

THAYER, E. O.—Asbestus from Pelham, Mass.

THAYER, MRS. L. R.—Geyser specimens from Yellowstone region.

TOBEY, MRS.—Collection of foreign shells.

TRACY, MISS.—Gold and silver ores from South America.

TRENT, G. R.—Pair of ducks.

TUCKER, MISS LOUIE.—Arrowhead from Durham, Conn.

TUTTLE, J.—Nest of crows (*Corvus americanus*), and chipmunk (*Tamias striatus*).

VANBENSCHOTEN, PROF. JAS. C.—Blue bird (*Sialia sialis*), and fossil corls (*Cyathophyllum, sp.*) Lima, Livingston Co., N. Y.

VAN DENBURG, PROF. M. W.—Collection of bird-skins, 64 specimens, Wayzata, Minn., and others from Middletown.

MUSEUM OF VASSAR COLLEGE, POUGHKEEPSIE, N. Y. 7 specimens of birds from Costa Rica, (exchange).

Verrill. Prof. A. E.—Collection of Mollusks from Eastport, Me., and Woods Holl, Mass.

Waldo, C. A.—Collection of minerals, Gouverneur, N. Y.

Wallace, John.—Mounted specimen of woodcock (*Philohela minor*).

Ward, H. D. A.—Flying squirrel (*Sciuropterus volucella*); collection of funguses; polished marbles, serpentine and porphyry; fur of musk ox (*Ovibos moschatus*), and various zoological specimens.

White, Prof. M. C.—Idols from China.

Williams, Prof.—Carboniferous fossils, Pittsburg, Pa.

Winchell, Prof. A.—Fossils from Michigan.

Woodward, H.—War club from Sandwich Islands.

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